



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,545	03/08/2006	James C. LeBlanc Sr	21291	1421
77176	7590	11/24/2009		
Novak, Druce & Quigg LLP				
1300 I Street, N.W.				
Suite 1000, West Tower				
WASHINGTON, DC 20005				
EXAMINER				
CULBRETH, ERIC D				
ART UNIT		PAPER NUMBER		
3616				
MAIL DATE		DELIVERY MODE		
11/24/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/524,545

Applicant(s)

LEBLANC SR ET AL.

Examiner

Eric Culbreth

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-8,11-21,23,26-41,43-51 and 54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20,21 and 54 is/are allowed.
- 6) ☒ Claim(s) 1,4-8,11-17,23,26-41 and 43-51 is/are rejected.
- 7) ☐ Claim(s) 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2009 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-646)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Disapproved Drawings

DETAILED ACTION

Drawings

1. The drawings were received on 9/9/09. These drawings are not approved because the shaft added under part 28 in Figure 3 is new matter (there is no support in the original specification for the exact structure of the shaft as illustrated). It is not necessary to resubmit the drawings; rather, if the specification were amended to recite that the shaft were "schematic" (for illustrative purposes only), the drawings would be approved.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the gearbox (claim 49) and aligned shafts (claim 51) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Because the drawings were not approved, the objection to the material in claim 51 remains.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 4-8, 14-15, 23, 26, 28-35, 41, 45-46, 49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dangel US004372418, cited by applicant in view of Yatsu et al US004606654.

Dangel discloses all the claimed subject matter except the cylindrical rollers inclined at 45 degrees to the bearing and inclined at 90 degrees relative to the successive roller. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dangel to include 45 degree rollers perpendicular to the successive roller as taught by Yatsu et al (Figure 3a, column 1, lines 29-35) in order to use a bearing arrangement that is well known in the art (Yatsu et al, column 1, lines 14-15), as such an arrangement would yield predictable results.

5. Claims 1, 5-7, 23, 26, 28-32, 35, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida US004172621, cited by applicant in view of Yatsu et al US004606654.

Yoshida discloses all the claimed subject matter except the cylindrical rollers inclined at 45 degrees to the bearing and inclined at 90 degrees relative to the successive roller. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yoshida to include 45 degree rollers perpendicular to the successive roller as taught by Yatsu et al (Figure 3a, column 1, lines 29-35) in order to use a bearing arrangement that is well known in the art (Yatsu et al, column 1, lines 14-15), as such an arrangement would yield predictable results.

6. Claims 11-13, 27, 29, 36-40, 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dangel et al in view of Yatsu et al as applied to claim 1, and further in view of Schmitz et al US005538274A, cited by applicant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dangel et al and Yatsu et al to include the lower control arm being a panel as taught by Schmitz et al's panel 56 in order to provide a stronger control arm for off road conditions, as the panel arm would yield predictable results (a stronger arm). Although the arm 56 is trapezoidal, to make the arm triangular would involve an obvious matter of design choice, as the specification attaches no criticality to the specific shape of the arm and the arm would appear to work the same whether is it trapezoidal or more triangular. Similarly, in the combination Schmitz et al's arm 56 is

angled in Figure 2, and making the arm curved would be an obvious design choice given the lack of showing of criticality of the specific shape. Also in Figure 2 of Schmitz et al in the combination the joint at 117 of the two illustrated universal joints at the outer end of the axle 120 is in the rim portion of the wheel. The features of claims 37-40 are taught by Dangel et al, the primary reference.

7. Claims 16-17 and 47-48 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Dangel et al in view of Yatsu et al as applied to claim 1, and further in view of Riese US004974872, cited by applicant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dangel et al and Yatsu et al to include an air spring between the vehicle body and a bracket on the upper control arm as taught by Riese in Figure 1 where air spring 39 is between body 43 and bracket 34 in order to control the suspension (Riese, column 2, lines 6-12).

1. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dangel et al in view of Yatsu et al as applied to claim 49, and further in view of Schoepe et al US003476200, cited by applicant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dangel et al and Yatsu et al to include disc brakes on the output shaft adjacent the differential as taught by Schoepe et al's brake discs 42 in order to make the suspensions interchangeable (Shoepe et al, column 3, lines 69-75).

Allowable Subject Matter

2. Claims 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. Claims 20-21 and 54 are allowed.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blais US003275391 and Kunimoto et al US007547144B2 were cited by applicant as crossed bearings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Culbreth
Primary Examiner
Art Unit 3616

/Eric Culbreth/
Primary Examiner, Art Unit 3616